ANT/MICL/06

ANTAR
1961.

1961

Arch. Is., 21/2/61.

Rock is brown. [illegible] granite, e.g. comp. of brown [illegible] & qtz. [illegible], has a [illegible]. E W (ish) [illegible] vert. Joints generally hard to see. Roughly [illegible] jointing [illegible] N60° ([illegible]), 2-6 ft apart, another 10-20 ft apart, and a widely spaced 20 ft and near horizontal.

(ii) Smoothed surfaces fairly common, but in many cases 'breached' only [illegible], the rest having exfoliated off.

[illegible]. fairly common, most E. [illegible]. Size from < 1 inch to abt. 2 feet. Shape from [illegible] to [illegible]. Most [illegible], [illegible] small, [illegible] to [illegible].

Most common [illegible]. [illegible] consisting of [illegible]

[illegible] grain, where [illegible] of a
[illegible] plut. of pegmat.
Some of these granites are [illegible]
banded + banding is not par. to
flow of granite!
[illegible] types are:
(1) a pink feldsp. qtz. + little
graphic rel. to feldsp. qts c some
biot. peg. textured [illegible] feldsp. qtz,
[illegible] + bio. in large crys,
in one seg. is a feldsp. + qtz
crys. these feldsp. well usually
a couple of ft. across.
Pegm. [illegible] of granite are [illegible]
peg. + aplit. [illegible]. [illegible]
[illegible] ft. [illegible] wide, along
join of granite.
Other types are more or less like granite but
finer grained - bio. to qtz. in
[illegible] but less pegm. Some
of former have de [illegible]
¼ inch wide.
One large [illegible] and [illegible]
10 ft across is fg. granite c
streaks of pegm. in feldsp.

In several places are single felsp crystals 3-4 ins. across, usually rounded, + brown. Could be either xenol. or phenocrysts. Not very common, and occ. only as isolated xls.
(Photo of xenol. + coarser granite (upper).

Henry G.o. 22/2/61.

Rock is c-mg biot granite ([illegible])
somewhat porphyritic, c slight
alignment of big felspars.
Inclusions fairly common,
most common being a f-mg
biot. felsp. schist. Some against
c fairly sharp contacts, others
rounded, some with rims,
all roughly aligned N
which is about same direction as
foln. All elongated.
Also some small (up to
4") green patches of fg. [illegible],
tough, [illegible] - felds, biot.
Edges rather ang. but [illegible].
Also roughly aligned [illegible]
of gran.
Weathered up to 1ft or more.
Some dark [illegible] granite
surface when, although fairly
common.

Several straight [illegible] of [illegible]
[illegible], [illegible] [illegible] up [illegible] 6" wide
[illegible] [illegible] [illegible] [illegible].
[illegible] [illegible], [illegible] [illegible] bluish
[illegible] than [illegible] ~~[illegible]~~
~~a [illegible]~~ texture. Edges sharp.
(lapies).

Also a couple of [illegible] ~~of~~
~~[illegible]~~ straight, [illegible] in from
width of one [illegible] [illegible]
[illegible] [illegible] length of [illegible].
Edges fairly sharp. [illegible] [illegible]
to [illegible] [illegible]

Some [illegible] (mostly small) of
[illegible] [illegible] [illegible] [illegible]
[illegible]. [illegible] of [illegible]
[illegible], [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible].

[illegible] of [illegible] on N 160°.

Alignment of [illegible]. seems to be a
line drawn [illegible] from a [illegible].
Sta. N 160 mag (= T)
Better devel. in some places
than in others.

Some of the dark fg. incl. have v.g. feldsp. porphyroblasts.

Westernmost group of [illegible] is sim. to main group with sim. incl. Por. of feldsp. is less pronounced, & cannot be seen in many places. Spec. from largest of this group of incl. for age det.

Several photos of group from ground & air.

Peak 1 Wilson Hills I
5/3/61.

Ht - 3470' see pocket

(1) Biot. rich gneiss then a band of felsp. + some veins of qtz felsp m.g.

(2) Dykes of m.g. qtz felsp + biot (aplite) several ft wide, some c̄ small garnet clusters rimmed by biot.

(3) Some bands of more biot felsp rich gneiss (aplite)

(2) Some dykes of c̄ biot-rich clusters 1-2" across, or in schlieren & long ½" wide, also garnet biot masses but not rimming

(4) Cutting all are dykes of more m.g. gran, discord + contort [illegible] also pegs, already c̄ finer phases cutting them in turn.

Stringers fingers of many peg. qtz biot rock along schist, some felsp. aggr. 1" across. Schl. of comp. ft long, 6" wide.

② Dykes & fingers of peg. same orgin, diff. degrees' complex dykes form networks (photo)

① Sm. pegm. acid schlie. made up of felsp. aggr. + horn. schl.

④ Spec. of fg. basic veining on schist.

⑤ Spec. of fg. acid-vein.

aneroid in saddle 2820
O/C 2780

Str. N 30 mag dip 80°E
tight folds in places, small in others, acid bands segregated.

6/3/61.

Aviation Is. Westernmost

① Biot felsp gn c̄ plag. veins + musc. inj. of mg biot gneiss

② Biot. gneiss (spec 2) mg equigran mass. forms irreg. bands up to several ft wide. Sharp edged, transgressive contacts, some straight others irreg. Cont. scattered felsp. phen. thumbnail sz 1cm & stained in spots.

Some inter. by thin veins of c-mg felsp c̄ some biot, + biot ~~rim~~ selvedge. Also some irreg sim patches. In places phen. form knots several " across.

In places are irreg masses a few ft across of cg felsp (white) + scattered biot c̄ local conc's. of biot. Grain size rather irreg.

In places veins in the region
to be local conc. of biot.
often tightly folded (photos of
these specimens). Report of lith.
var. from [illegible]
Gneiss is f.m.g. biot. [illegible],
usually some fine banding
in places, biot. laminae pul-a
bit (photo). Very tight
contortions visible in places.
Typical pegm. veins fairly
common. Gn. cut through
very long thin veins of m.g.
gran.

Some transgressive ~~[illegible]~~ lens-
like veins of fg pegm [illegible]
(apex) sharp str. edges.

Some of the coarse acid veins
cont. ? grains, many cont
muscovite. Iron staining
assoc. c̄ ? grains.

In many of the smaller
veins, mic. the common
of bit.gn. (or apparently

Gneiss is folded but gen str appears to be N30°E and dip 60-80° W. Compass bearing from ship N131°E and Only about a mile. Ste poss. dist N60.

Some of the qz. gran. veins cont crystals of ? zircon fairly common in places (3 pieces). In another place, one cont. fluorite?, - or corundum, since sillimanite is present in one piece.

5/3/61.

Aviation Rd. Belmont

Rock is porph. gr. gn. (spec. A) mg-cg, c̄ a good foln. of felsp. N 50 W, 70 N (mag). In places biot, forms thin streaks through rock. A few cg patches, felsp c̄ biot + hbn-e. Small clusters of pin head garnet (red) in a few places.

A dyke, 5 ft wide, cutting across foln of gr gn (spec. B) of mg gran, sharp edges fairly straight.

Also several thin dykes up to 1 ft wide, of f-mg diab (spec. D) blk, sharp edged [illegible] some c̄ a lighter selvedge ~~[illegible]~~ same width as dyke.

Several inch in [illegible], sharp edged, of dark [illegible]

rock prob biot & hbp & c̄
lathlike feldsp porphyroblasts
up to 1" long.
A vein of iron stained
qtz (spec. c.).
In center of island in gap
is banded gn. like that on
first island forming band
abt 50 ft thick. Darker
colored c̄ banding fairly
prom. Did not appear to be
greatly intruded by granite.
In part of it was an
iron stained band, several
feet wide

Texture of granite is
slightly variable, but general
appear. is same all over. Biot.
content varies slightly.

6/3/61.

Rivilan Islands.

Islands between easternmost and westernmost are best. gn. like western one. Granite veining is less prominent (apparently)

On island second from east strike apparently N 60 (mag) dip 70° N. Jointing is much more apparent than on westernmost esp. jointing par. to foln. and also that jts normal to foln. On western is jts are fairly widely spaced although in places rock is split par to foln.

Main Question is 298? my
flu now.

Peak 2.

mainly garnet. gran gn, irreg. textured! most common is little coarser than sugary w felsp. qtz biot & red-brown garn (spec 1) Poor foln. Garnet commonly in 1/4" clusters. Garn almost absent from some parts, esp somewhat finer gr. Then mg-rich area coarser (spec 2 [illegible]) patches several in across felsp (fibrous) some qtz garn & big biot (1") Tendency for garn to be more common in these.

Iron grains are remnants of banded gn commonly [illegible] ft wide. Gran veins at [illegible] thin, sharp edged, f-mg. Also cutting everything are pegs a few in wide. Slight pegmatitically common around, felsp & [illegible]

[illegible] under, scattered red in garnet, but not common. Feldsp. is perthitic, weathering buff or
Also there 1/2" long straight feldsp. crystals.
Gneiss is long. biot. feldsp. usually banded & thin [illegible] bands close spaced. Small scattered clusters of pink garnet, and fg. [illegible] best seen on weathered surface. Fine-grained clusters of fg. biot.
Mg. gneiss veins cut them, usually par. to banding. In places gneiss is [illegible] invaded by masses of [illegible] flesh, some (fg massive), others ranging up to vcg. In places veining is so common that only [illegible] remnants of gneiss left. Most of these have a streaked out look.
In places are [illegible] large masses of [illegible] and/or gneiss

[illegible]

[illegible]

Gneiss commonly strongly foliated. General strike appears abt N 20° (mag) dip west bet 20 - 60. However [illegible] many folds.

20' south of northern low peak is a basalt dyke, 3' wide strike 40° mag. [illegible] vert. Vesicular, well jtd, and weathered clay. blue on outer surface of pieces (spec) Spec of contact from first lower down.

Another type of rock is fine [illegible] dike cutting across and green [illegible] & cements of [illegible] [illegible]. Dike is highly [illegible] pink [illegible] but not [illegible] strike abt 50° mag. Abt 20 ft wide. (spec 4) Another [illegible] lower down.

ph 2 [illegible] 600

ft 2000

ph 3 end 4,160

ft 22000

Rfl on 2.

p.h 3 stk N30 mag

dip 70 60-80° E mag

[illegible]

Peak 3.

Sim to Peak 2 but gn
not quite so [illegible] perfect.
([illegible]). The [illegible] veins
great stretches of gn c and
veins. Veins are pegmatitic
[illegible]; [illegible] garnet grain c
little biot, + in places, few
garnets. Some feldsp. lens
in places, of [illegible] —
common as veins ½-1"
wh along foln of gn locally.
Some vein of feldsp!
Rocks appear to be tightly
folded in folds several
ft across.

From air, a net of broad pink
veins seen on east side of next
peak to the west of Peak 3.
At NE corner of peak end
of Peak 3, a well seen [illegible]

is pinkish colour. Rest of
rock is chocolate coloured.

Up. lst. walls [illegible] bed
& Tomlin Clay. (at least)
shows evidence of faulted
part to coast. Lower end
in places 3 levels of
sediments in basin.

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